Loctite Corporation

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MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Product Name SUPERBONDER® 496 INSTANT ADHESIVE DPM 3080 Part No. 496
Product Type Cyanoacrylate Ester Formula No. dna

II. COMPOSITION

Ingredients	% by Wt.	Hazard
Methyl cyanoacrylate	90-95	See Section IV.
Poly (methyl methacrylate)*	5-10	↓
Hydroquinone	<0.5	

*Pure poly (methyl methacrylate) has been shown to cause tumors in experimental animals when implanted beneath the skin. In light of the low concentration of this component in the product, it is our best technical judgment that normal use of this product poses no such hazard. These warnings are present only to comply with OSHA regulations.

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure < 0.2 mm at 75°F
Vapor Density ~3
Solubility in Water Polymerized by water
Appearance Clear Liquid
Specific Gravity 1.09 at 75°F
Boiling Point > 300°F
pH dna
Odor Sharp, irritating

IV. TOXICITY AND HEALTH HAZARD DATA

Toxicity Bonds skin rapidly & strongly. Skin and eye irritant.
Est. Oral LD 50 >5000 mg/kg
Est. Dermal LD 50 >2000 mg/kg
TLV 2 ppm
Symptoms of Overexposure Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and repeated overexposure to vapors may produce allergic reactions with asthma-like symptoms in sensitive individuals.

Emergency Treatment Procedures
Ingestion: See instructions on back side for emergency procedures.
Inhalation: Remove to fresh air. Treat symptomatically.
Skin Contact: See instructions on back side for emergency procedures.
Eye Contact: See instructions on back side for emergency procedures.

Personal Protection
Eyes: Safety glasses or goggles mandatory.
Skin: Polyethylene gloves recommended. Do not use cotton gloves.
Ventilation: Positive down-draft exhaust ventilation should be provided to maintain vapor concentration below TLV.

V. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point >200° F Method T.C.C.
Explosive Limits (% by volume in air) Lower dna % Upper dna %
Recommended Extinguishing Agents CO_2, Foam, Dry Chemical
Hazardous Products Formed by Fire or Thermal Decomposition: Irritating organic fragments.
Unusual Fire or Explosion Hazards: None
Compressed Gases Name None
Pressure at Room Temperature dna

Note: "dna" means "Does Not Apply"

SUPERBONDER® 496 INSTANT ADHESIVE

VI. REACTIVITY DATA

Stability [X] Stable [ ] Unstable
Hazardous Polymerization [ ] May Occur [X] Will Not Occur
Hazardous Decomposition Products (non-thermal)
None

Incompatibility Polymerized by water, alcohols, amines, alkalies.

VII. SPILL OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case of spill or leak: Flood with water to polymerize. Soak up with an inert absorbent.

Recommended methods of disposal: Polymerize as above. Landfill or incinerate in accordance with EPA and local regulations.

VIII. STORAGE AND HANDLING PROCEDURES

Storage: Store at or below 75°F to maximize shelf life.
Handling: Avoid contact with skin and eyes. Avoid breathing vapors.

IX. SHIPPING REGULATIONS

Type or Class DOT Not regulated (≤ 1 pint); ORM-A (> 1 pint)
IATA Not regulated; [ORM-A (> 1 pint) in U.S. only]
Proper Shipping Name DOT Not regulated (≤ 1 pint); ORM-A, n.o.s. (> 1 pint)
IATA Not regulated; [ORM-A, n.o.s. (> 1 pint) in U.S. only]

Prepared By: Stephen Repetto Stephen Repetto
Title: Environmental Health and Safety Specialist
Date: August 15, 1986

Information for First Aid and Casualty on Treatment for Adhesion of Human Skin to Itself if caused by Cyanoacrylate Adhesives

Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds human tissue including skin in seconds. Experience has shown that accidents due to cyanoacrylates are handled best by passive, non-surgical first aid. Treatment of specific types of accidents are given below.

SKIN ADHESION

First immerse the bonded surfaces in warm soapy water.

Peel or roll the surfaces apart with the aid of a blunt edge, e.g. a spatula or a teaspoon handle; then remove adhesive from the skin with soap and water.

Do *not* try and pull surfaces apart with a direct opposing action.

EYELID TO EYELID OR EYEBALL ADHESION

In the event that eyelids are stuck together or bonded to the eyeball, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in 1-4 days. There will be no residual damage. Do *not* try to open the eyes by manipulation.

ADHESIVE ON THE EYEBALL

Cyanoacrylate introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods generally covering several hours. This will cause periods of weeping until clearance is achieved. During the period of contamination double vision may be experienced together with a lachrymatory effect, and it is important to understand the cause and realize that disassociation will normally occur within a matter of hours, even with gross contamination.

MOUTH

If lips are accidentally stuck together apply lots of warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do *not* try and pull the lips with direct opposing action.

It is almost impossible to swallow cyanoacrylate. The adhesive solidifies and adheres in the mouth. Saliva will lift the adhesive in ½ to 2 days. In case a lump forms in the mouth, position the patient to prevent ingestion of the lump when it detaches.

BURNS

Cyanoacrylates give off heat on solidification. In rare cases a large drop will increase in temperature enough to cause a burn. Burns should be treated normally after the lump of cyanoacrylate is released from the tissue as described above.

SURGERY

It should never be necessary to use such a drastic method to separate accidentally bonded skin.

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